

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/507,140
Source: PC/10
Date Processed by STIC: 12/8/05

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/507,140

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line. This may occur if your file
 Wrapped Aminos was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will
 prevent "wrapping."

- 2 Invalid Line Length The rules require that a line **not exceed** 72 characters in length. This includes white spaces.

- 3 Misaligned Amino The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers;
 Numbering use **space characters**, instead.

- 4 Non-ASCII The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please**
 ensure your subsequent submission is saved in ASCII text.

- 5 Variable Length Sequence(s) contain n's or Xaa's representing more than one residue. **Per Sequence Rules,**
 each n or Xaa can only represent a single residue. Please present the **maximum** number of each
 residue having variable length and indicate in the <220>-<223> section that some may be missing.

- 6 PatentIn 2.0 A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
 "bug" sequences(s) . Normally, PatentIn would automatically generate this section from the
 previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to
 the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for**
 Artificial or Unknown sequences.

- 7 Skipped Sequences Sequence(s) missing. If intentional, please insert the following lines for **each** skipped sequence:
 (OLD RULES) (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped

 Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.

- 8 Skipped Sequences Sequence(s) missing. If intentional, please insert the following lines for **each** skipped sequence.
 (NEW RULES) <210> sequence id number
 <400> sequence id number
 000

- 9 Use of n's or Xaa's Use of n's and/or Xaa's have been detected in the Sequence Listing.
 (NEW RULES) Per 1.823 of Sequence Rules, use of <220>-<223> is **MANDATORY** if n's or Xaa's are present.
 In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.

- 10 Invalid <213> Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or
 Response scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or
 is Artificial Sequence

- 11 Use of <220> Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses
 Use of <220> to <223> is **MANDATORY** if <213> "Organism" response is "Artificial Sequence" or
 "Unknown." Please explain source of genetic material in <220> to <223> section.
 (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)

- 12 PatentIn 2.0 Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,
 "bug" resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence
 listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

- 13 Misuse of n/Xaa "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



PCT

RAW SEQUENCE LISTING

DATE: 12/08/2005

PATENT APPLICATION: US/10/507,140

TIME: 10:59:19

Input Set : E:\seq_listing.txt

Output Set: N:\CRF4\12082005\J507140.raw

3 <110> APPLICANT: NERI, Dario
 4 MELKKO, Samu
 6 <120> TITLE OF INVENTION: Encoded Self-Assembling Chemical Libraries (Esachel)
 8 <130> FILE REFERENCE: PUS-E005-105B
 10 <140> CURRENT APPLICATION NUMBER: 10/507,140
 C--> 11 <141> CURRENT FILING DATE: 2004-09-07
 13 <150> PRIOR APPLICATION NUMBER: PCT/EP02/04153
 14 <151> PRIOR FILING DATE: 2002-03-08
 16 <160> NUMBER OF SEQ ID NOS: 28
 18 <170> SOFTWARE: PatentIn version 3.3
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 60
 22 <212> TYPE: DNA
 23 <213> ORGANISM: Artificial
 25 <220> FEATURE:
 26 <223> OTHER INFORMATION: Primer L19VH_Eco_fo
 28 <400> SEQUENCE: 1
 29 ttccacacag aattcattaa agaggagaaa ttaactatgg aggtgcagct gttggagtct 60
 32 <210> SEQ ID NO: 2
 33 <211> LENGTH: 66
 34 <212> TYPE: DNA
 35 <213> ORGANISM: Artificial
 37 <220> FEATURE:
 38 <223> OTHER INFORMATION: Primer L19VH_Hind_ba
 40 <400> SEQUENCE: 2
 41 tcaatctgat taagcttagt gatggtgatg gtgatgacat ccaccactcg agacggtgac 60
 43 cagggt 66
 46 <210> SEQ ID NO: 3
 47 <211> LENGTH: 63
 48 <212> TYPE: DNA
 49 <213> ORGANISM: Artificial
 51 <220> FEATURE:
 52 <223> OTHER INFORMATION: Primer L19VL_Eco_fo
 54 <400> SEQUENCE: 3
 55 ttccacacag aattcattaa agaggagaaa ttaactatgg aaattgtggt gacgcagtct 60
 57 cca 63
 60 <210> SEQ ID NO: 4
 61 <211> LENGTH: 69
 62 <212> TYPE: DNA
 63 <213> ORGANISM: Artificial
 65 <220> FEATURE:
 66 <223> OTHER INFORMATION: Primer L19VL_Hind_ba
 68 <400> SEQUENCE: 4

Does Not Comply
 Corrected Diskette Needed
 pp 2-4

RAW SEQUENCE LISTING

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Input Set : E:\seq_listing.txt

Output Set: N:\CRF4\12082005\J507140.raw

```

69 tcaatctgat taagcttagt gatggtgatg gtgatgacat ccacctttga tttccacctt      60
71 ggtcccttg      69
74 <210> SEQ ID NO: 5
75 <211> LENGTH: 60
76 <212> TYPE: DNA
77 <213> ORGANISM: Artificial
79 <220> FEATURE:
80 <223> OTHER INFORMATION: Primer HH10VH_Eco_fo
82 <400> SEQUENCE: 5
83 tttcacacag aattcattaa agaggagaaa ttaactatgg aggtgaagct gcagcagtct      60
86 <210> SEQ ID NO: 6
87 <211> LENGTH: 66
88 <212> TYPE: DNA
89 <213> ORGANISM: Artificial
91 <220> FEATURE:
92 <223> OTHER INFORMATION: Primer HH10VH_Hind_ba
94 <400> SEQUENCE: 6
95 tcaatctgat taagcttagt gatggtgatg gtgatgacat ccacctgcag agacagtgc      60
97 cagagt      66
100 <210> SEQ ID NO: 7
101 <211> LENGTH: 63
102 <212> TYPE: DNA
103 <213> ORGANISM: Artificial
105 <220> FEATURE:
106 <223> OTHER INFORMATION: Primer HH10VL_Eco_fo
108 <400> SEQUENCE: 7
109 tttcacacag aattcattaa agaggagaaa ttaactatgg atattgtgct aactcagtct      60
111 cca      63
114 <210> SEQ ID NO: 8
115 <211> LENGTH: 69
116 <212> TYPE: DNA
117 <213> ORGANISM: Artificial
119 <220> FEATURE:
120 <223> OTHER INFORMATION: Primer HH10VL_Hind_ba
122 <400> SEQUENCE: 8
123 tcaatctgat taagcttagt gatggtgatg gtgatgacat ccacctttta tttccagctt      60
125 ggtccccc      69
128 <210> SEQ ID NO: 9
129 <211> LENGTH: 48
130 <212> TYPE: DNA
131 <213> ORGANISM: Artificial
133 <220> FEATURE:
134 <223> OTHER INFORMATION: with 5' -thiol
136 <400> SEQUENCE: 9
137 ggagcttctg aattctgtgt gctgcataat cgacacgaat tccgcagc
140 <210> SEQ ID NO: 10
141 <211> LENGTH: 48
142 <212> TYPE: DNA
143 <213> ORGANISM: Artificial

```

yes, but insufficient explanation of
Artificial Sequence
48 (give source
of genetic
material -
see item 11 on
Error Summary
sheet)

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/507,140

DATE: 12/08/2005

TIME: 10:59:19

Input Set : E:\seq_listing.txt

Output Set: N:\CRF4\12082005\J507140.raw

145 <220> FEATURE:
 146 <223> OTHER INFORMATION: with 3' -thiol *same env*
 148 <400> SEQUENCE: 10
 149 tcgcgagggg aattcgtcat atatcagcac acagaattca gaagctcc 48
 152 <210> SEQ ID NO: 11
 153 <211> LENGTH: 48
 154 <212> TYPE: DNA
 155 <213> ORGANISM: Artificial
 157 <220> FEATURE:
 158 <223> OTHER INFORMATION: HyHel10_5SH with 5'-thiol
 160 <400> SEQUENCE: 11
 161 ggagcttctg aattctgtgt gctgcagtgg cgacacgaat tccgcagc 48
 164 <210> SEQ ID NO: 12
 165 <211> LENGTH: 48
 166 <212> TYPE: DNA
 167 <213> ORGANISM: Artificial
 169 <220> FEATURE:
 170 <223> OTHER INFORMATION: Primer HyHel10_3SH with 3'-thiol
 172 <400> SEQUENCE: 12
 173 tcgcgagggg aattcgtcat agggcagcac acagaattca gaagctcc 48
 176 <210> SEQ ID NO: 13
 177 <211> LENGTH: 48
 178 <212> TYPE: DNA
 179 <213> ORGANISM: Artificial
 181 <220> FEATURE:
 182 <223> OTHER INFORMATION: Primer GST_5SH with 5'-thiol
 184 <400> SEQUENCE: 13
 185 ggagcttctg aattctgtgt gctgctgagg cgacacgaat tccgcagc 48
 188 <210> SEQ ID NO: 14
 189 <211> LENGTH: 48
 190 <212> TYPE: DNA
 191 <213> ORGANISM: Artificial
 193 <220> FEATURE:
 194 <223> OTHER INFORMATION: Primer GST_3SH with 3'-thiol
 196 <400> SEQUENCE: 14
 197 tcgcgagggg aattcgtcaa gaggcagcac acagaattca gaagctcc 48
 200 <210> SEQ ID NO: 15
 201 <211> LENGTH: 24
 202 <212> TYPE: DNA
 203 <213> ORGANISM: Artificial
 205 <220> FEATURE:
 206 <223> OTHER INFORMATION: Primer 1AB_PCRfo
 208 <400> SEQUENCE: 15
 209 ggagcttctg aattctgtgt gctg 24
 212 <210> SEQ ID NO: 16
 213 <211> LENGTH: 18
 214 <212> TYPE: DNA
 215 <213> ORGANISM: Artificial
 217 <220> FEATURE:

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/507,140

DATE: 12/08/2005

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Input Set : E:\seq_listing.txt

Output Set: N:\CRF4\12082005\J507140.raw

218 <223> OTHER INFORMATION: Primer 1A_PCRba
 220 <400> SEQUENCE: 16
 221 gctgcggaat tcgtgtcg 18
 224 <210> SEQ ID NO: 17
 225 <211> LENGTH: 18
 226 <212> TYPE: DNA
 227 <213> ORGANISM: Artificial
 229 <220> FEATURE:
 230 <223> OTHER INFORMATION: Primer 1B_PCRba
 232 <400> SEQUENCE: 17
 233 tcgcgagggg aattcgtc 18
 236 <210> SEQ ID NO: 18
 237 <211> LENGTH: 39
 238 <212> TYPE: DNA
 239 <213> ORGANISM: Artificial
 241 <220> FEATURE:
 242 <223> OTHER INFORMATION: Primer typeB_oligo
 244 <400> SEQUENCE: 18
 245 gcataccgga attcccagca taatgatcgc tatcgctgc 39
 248 <210> SEQ ID NO: 19
 249 <211> LENGTH: 63
 250 <212> TYPE: DNA
 251 <213> ORGANISM: Artificial
 253 <220> FEATURE:
 254 <223> OTHER INFORMATION: Primer typeA_oligo with spacer element; d is a, c, g, or t
 257 <220> FEATURE:
 W--> 258 <221> NAME/KEY: Spacer element
 259 <222> LOCATION: (40)..(45)
 261 <400> SEQUENCE: 19
 262 cgtcagctcg aattctccat atatgcagcg atagcgatcd dddddctggg aattccggta 60
 264 tgc 63
 267 <210> SEQ ID NO: 20
 268 <211> LENGTH: 18
 269 <212> TYPE: DNA
 270 <213> ORGANISM: Artificial
 272 <220> FEATURE:
 273 <223> OTHER INFORMATION: Primer CodeABfo
 275 <400> SEQUENCE: 20
 276 gcataccgga attcccag 18
 279 <210> SEQ ID NO: 21
 280 <211> LENGTH: 18
 281 <212> TYPE: DNA
 282 <213> ORGANISM: Artificial
 284 <220> FEATURE:
 285 <223> OTHER INFORMATION: Primer CodeABba
 287 <400> SEQUENCE: 21
 288 cgtcagctcg aattctcc 18
 291 <210> SEQ ID NO: 22
 292 <211> LENGTH: 29

Per sequence rules:

d is a, c, g, or t

"d" can

only represent

a or g or t;

use "n"
instead and

18 Explain in
<220>-<223>
section

RAW SEQUENCE LISTING

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DATE: 12/08/2005

TIME: 10:59:19

Input Set : E:\seq_listing.txt

Output Set: N:\CRF4\12082005\J507140.raw

293 <212> TYPE: DNA
 294 <213> ORGANISM: Artificial
 296 <220> FEATURE:
 297 <223> OTHER INFORMATION: Primer with 5' sequence specifically coding a member of a
 298 sublibrary; where n is a, c, g, or t
 301 <220> FEATURE:
 302 <221> NAME/KEY: misc_feature
 303 <222> LOCATION: (1)..(5)
 304 <223> OTHER INFORMATION: n is a, c, g, or t
 306 <400> SEQUENCE: 22
 307 nnnnnncagca cacagaattc agaagctcc 29
 310 <210> SEQ ID NO: 23
 311 <211> LENGTH: 29
 312 <212> TYPE: DNA
 313 <213> ORGANISM: Artificial
 315 <220> FEATURE:
 316 <223> OTHER INFORMATION: Primer with a 3' sequence specific for a member of a
 library;
 317 where n is a, c, g, or t
 320 <220> FEATURE:
 321 <221> NAME/KEY: misc_feature
 322 <222> LOCATION: (25)..(29)
 323 <223> OTHER INFORMATION: n is a, c, g, or t
 325 <400> SEQUENCE: 23
 W--> 326 ggagcttctg aattctgtgt gctgnnnnn 29
 329 <210> SEQ ID NO: 24
 330 <211> LENGTH: 24
 331 <212> TYPE: DNA
 332 <213> ORGANISM: Artificial
 334 <220> FEATURE:
 335 <223> OTHER INFORMATION: Primer with 5' sequence specific for a chemical moiety
 linked to
 336 primer by a biotinylated base analog
 338 <400> SEQUENCE: 24
 339 cagcacacag aattcagaag ctcc 24
 342 <210> SEQ ID NO: 25
 343 <211> LENGTH: 48
 344 <212> TYPE: DNA
 345 <213> ORGANISM: Artificial
 347 <220> FEATURE:
 348 <223> OTHER INFORMATION: Primer with 5' iminobiotinyl-NH-(CH₂)₆ group
 350 <400> SEQUENCE: 25
 351 ggagcttctg aattctgtgt gctgattggc cgacacgaat tccgcagc 48
 354 <210> SEQ ID NO: 26
 355 <211> LENGTH: 48
 356 <212> TYPE: DNA
 357 <213> ORGANISM: Artificial
 359 <220> FEATURE:
 360 <223> OTHER INFORMATION: Primer with 3' (CH₂)₆-NH-iminobiotinyl group
 362 <400> SEQUENCE: 26
 363 tcgcgagggg aattcgatcat ttaccagcac acagaattca gaagctcc 48

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/507,140

DATE: 12/08/2005
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Input Set : E:\seq_listing.txt
Output Set: N:\CRF4\12082005\J507140.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:22; N Pos. 1,2,3,4,5
Seq#:23; N Pos. 25,26,27,28,29

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27
Seq#:28

VERIFICATION SUMMARY

DATE: 12/08/2005

PATENT APPLICATION: US/10/507,140

TIME: 10:59:20

Input Set : E:\seq_listing.txt

Output Set: N:\CRF4\12082005\J507140.raw

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:258 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19
L:307 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0